- (f) Owners or operators of affected sources complying with §63.489(d), shall comply with paragraph (f)(1) or (f)(2) of this section, as appropriate.
- (1) Submit reports of the times of all periods recorded under §63.491(e)(3) when the batch front-end process vent is diverted away from the control device through a bypass line, with the next Periodic Report.
- (2) Submit reports of all occurrences recorded under §63.491(e)(4) in which the seal mechanism is broken, the bypass line damper or valve position has changed, or the key to unlock the bypass line damper or valve was checked out, with the next Periodic Report.

[62 FR 46925, Sept. 5, 1996, as amended at 65 FR 38065, June 19, 2000]

## §63.493 Back-end process provisions.

Owners and operators of new and existing affected sources shall comply with the requirements in §§ 63.494 through 63.500. Owners and operators of affected sources whose only elastomer products are latex products, liquid rubber products, or products produced in a gas-phased reaction process, are not subject to the provisions of §§ 63.494 through 63.500. If latex or liquid rubber products are produced in an affected source that also produces another elastomer product, the provisions of §§ 63.494 through 63.500 do not apply to the back-end operations dedicated to the production of one or more latex products, or to the back-end operations during the production of a latex product. Table 8 to this subpart contains a summary of compliance alternative requirements for the emission limits in §63.494(a)(1)-(3) and associated requirements.

[76 FR 22589, Apr. 21, 2011]

## § 63.494 Back-end process provisions residual organic HAP and emission limitations.

(a) The monthly weighted average residual organic HAP content of all grades of styrene butadiene rubber produced by the emulsion process, polybutadiene rubber and styrene butadiene rubber produced by the solution process, and ethylene-propylene rubber produced by the solution process that is processed, shall be measured after

the stripping operation (or the reactor(s), if the plant has no stripper(s)), as specified in §63.495(d), and shall not exceed the limits provided in paragraphs (a)(1) through (3) of this section, as applicable. Owners or operators of these affected sources shall comply with the requirements of paragraphs (a)(1) through (3) of this section using either stripping technology, or control or recovery devices. The organic HAP emissions from all back-end process operations at affected sources producing butyl rubber, epichlorohydrin elastomer, neoprene, and nitrile butadiene rubber shall not exceed the limits determined in accordance with paragraph (a)(4) of this section, as applicable.

- (1) For styrene butadiene rubber produced by the emulsion process:
- (i) A monthly weighted average of 0.40 kg styrene per megagram (Mg) latex for existing affected sources; and
- (ii) A monthly weighted average of 0.23 kg styrene per Mg latex for new sources:
- (2) For polybutadiene rubber and styrene butadiene rubber produced by the solution process:
- (i) A monthly weighted average of 10 kg total organic HAP per Mg crumb rubber (dry weight) for existing affected sources; and
- (ii) A monthly weighted average of 6 kg total organic HAP per Mg crumb rubber (dry weight) for new sources.
- (3) For ethylene-propylene rubber produced by the solution process:
- (i) A monthly weighted average of 8 kg total organic HAP per Mg crumb rubber (dry weight) for existing affected sources; and
- (ii) A monthly weighted average of 5 kg total organic HAP per Mg crumb rubber (dry weight) for new sources.
- (4) The organic HAP emissions from back-end processes at affected sources producing butyl rubber, epichlorohydrin elastomer, neoprene, and nitrile butadiene rubber shall not exceed the limits determined in accordance with paragraphs (a)(4)(i) through (iv) of this section for any consecutive 12-month period. The specific limitation for each elastomer type shall be determined based on the calculation or the emissions level provided in paragraphs (a)(4)(i) through (iv) of this section divided by the base year elastomer

## § 63.494

product that leaves the stripping operation (or the reactor(s), if the plant has no stripper(s)). The limitation shall be calculated and submitted in accordance with §63.499(f)(1).

(i) For butyl rubber, the organic HAP emission limitation shall be calculated using the following equation:

ER21AP11.003

## Where:

Be<sub>2009</sub> = Bypass emissions in 2009, Mg/yr BREL = Butyl rubber emission limit, Mg organic HAP emissions/Mg butyl rubber produced

 $Ce_{2009}$  = Controlled emissions in 2009, Mg/yr  $P_{2009}$  = Total elastomer product leaving the stripper in 2009, Mg/yr

UCe<sub>2009</sub> = Uncontrolled emissions in 2009, Mg/

1.35 = variability factor, unitless

- (ii) For epichlorohydrin elastomer, the organic HAP emission limitation, in units of Mg organic HAP emissions per Mg of epichlorohydrin elastomer produced, shall be calculated by dividing 51 Mg/yr by the mass of epichlorohydrin elastomer produced in 2009, in Mg.
- (iii) For neoprene, the organic HAP emission limitation, in units of Mg organic HAP emissions per Mg of neoprene produced, shall be calculated by dividing 30 Mg/yr by the mass of neoprene produced in 2007, in Mg.
- (iv) For nitrile butadiene rubber, the organic HAP emission limitation, in units of Mg organic HAP emissions per Mg of nitrile butadiene rubber produced, shall be calculated by dividing 2.4 Mg/yr by the mass of nitrile butadiene rubber produced in 2009, in Mg.
- (5) For EPPU that produce both an elastomer product with a residual organic HAP limitation listed in paragraphs (a)(1) through (3) of this section, and a product listed in paragraphs (a)(5)(i) through (iv) of this section, only the residual HAP content of the elastomer product with a residual organic HAP limitation shall be used in determining the monthly average residual organic HAP content.
  - (i) Resins;
  - (ii) Liquid rubber products;

- (iii) Latexes from which crumb rubber is not coagulated; or
- (iii) Elastomer products listed in paragraph (a)(4) of this section.
- (6) There are no back-end process operation residual organic HAP or emission limitations for  ${\rm Hypalon^{\, {\rm TM}}}$  and polysulfide rubber production. There are also no back-end process operation residual organic HAP limitations for latex products, liquid rubber products, products produced in a gas-phased reaction process, styrene butadiene rubber produced by any process other than a solution oremulsion process. polybutadiene rubber produced by any process other than a solution process, or ethylene-propylene rubber produced by any process other than a solution process.
- (b) If an owner or operator complies with the residual organic HAP limitations in paragraph (a)(1) through (3) of this section using stripping technology, compliance shall be demonstrated in accordance with §63.495. The owner or operator shall also comply with the recordkeeping provisions in §63.498, and the reporting provisions in §63.499.
- (c) If an owner or operator complies with the residual organic HAP limitations in paragraph (a)(1) through (3) of this section using control or recovery devices, compliance shall be demonstrated using the procedures in §63.496. The owner or operator shall also comply with the monitoring provisions in §63.497, the recordkeeping provisions in §63.498, and the reporting provisions in §63.499.
- (d) If the owner or operator complies with the residual organic HAP limitations in paragraph (a)(1) through (3) of this section using a flare, the owner or operator of an affected source shall

comply with the requirements in  $\S63.504(c)$ .

[62 FR 46925, Sept. 5, 1996, as amended at 65 FR 38065, June 19, 2000; 76 FR 22589, Apr. 21, 2011]

- § 63.495 Back-end process provisions procedures to determine compliance with residual organic HAP limitations using stripping technology and organic HAP emissions limitations.
- (a) If an owner or operator complies with the residual organic HAP limitations in §63.494(a)(1) through (3) using stripping technology, compliance shall be demonstrated using the periodic sampling procedures in paragraph (b) of this section, or using the stripper parameter monitoring procedures in paragraph (c) of this section. The owner or operator shall determine the monthly weighted average residual organic HAP content for each month in which any portion of the back-end of an elastomer production process is in operation. A single monthly weighted average shall be determined for all back-end process operations at the affected source.
- (b) If the owner or operator is demonstrating compliance using periodic sampling, this demonstration shall be in accordance with paragraphs (b)(1) through (b)(5) of this section.
- (1) The location of the sampling shall be in accordance with paragraph (d) of this section.
- (2) The frequency of the sampling shall be in accordance with paragraphs (b)(2)(i) or (b)(2)(ii) of this section.
- (i) If a stripper operated in batch mode is used, at least one representative sample is to be taken from every batch of elastomer produced, at the location specified in paragraph (d) of this section, and identified by elastomer type and by the date and time the batch is completed.
- (ii) If a stripper operated in continuous mode is used, at least one representative sample is to be taken each operating day. The sample is to be taken at the location specified in paragraph (d) of this section, and identified by elastomer type and by the date and time the sample was taken.
- (3) The residual organic HAP content in each sample is to be determined

using the Methods specified in paragraph (e) of this section.

- (4) The quantity of material (weight of latex or dry crumb rubber) represented by each sample shall be recorded. Acceptable methods of determining this quantity are production records, measurement of stream characteristics, and engineering calculations.
- (5) The monthly weighted average shall be determined using the equation in paragraph (f) of this section. All representative samples taken and analyzed during the month shall be used in the determination of the monthly weighted average.
- (c) If the owner or operator is demonstrating compliance using stripper parameter monitoring, this demonstration shall be in accordance with paragraphs (c)(1) through (c)(4) of this section.
- (1) The owner or operator shall establish stripper operating parameter levels for each grade in accordance with §63.505(e).
- (2) The owner or operator shall monitor the stripper operating parameters at all times the stripper is in operation. Readings of each parameter shall be made at intervals no greater than 15 minutes.
- (3) The residual organic HAP content for each grade shall be determined in accordance with either paragraph (c)(3)(i) or (c)(3)(ii) of this section.
- (i) If during the processing of a grade in the stripper, all hourly average parameter values are in accordance with operating parameter levels established in paragraph (c)(1) of this section, the owner or operator shall use the residual organic HAP content determined in accordance with §63.505(e)(1).
- (ii) If during the processing of a grade in the stripper, the hourly average of any stripper monitoring parameter is not in accordance with an established operating parameter level, the residual organic HAP content shall be determined using the procedures in paragraphs (b)(1) and (b)(3) of this section.
- (4) The monthly weighted average shall be determined using the equation in paragraph (f) of this section.
- (d) The location of the sampling shall be in accordance with paragraph (d)(1) or (d)(2) of this section.